

What is claimed is:

1. A laser system for a dual wavelength of 1064/532 nm, comprising:

a laser oscillator oscillating a laser beam;

a second harmonic generation module receiving the laser beam from the laser
5 oscillator and generating a second harmonic wavelength; and

a reflection mirror detachably arranged between the oscillator and the second
harmonic generation module to reflect the laser beam oscillated by the laser
oscillator in one direction when installed on a laser beam path,

wherein the laser system oscillates a laser beam having a 1064 nm
10 wavelength when the reflection mirror is installed on the laser beam path and a laser
beam having a 532 nm wavelength when the reflection mirror is detached from the
laser beam path.

2. The laser system as claimed in claim 1, further comprising a horizontal

15 transfer unit or a rotation unit to detach or attach the reflection mirror from or on the
laser beam path.

3. A chip scale marker for a dual wavelength of 1064/532 nm, the chip
scale marker comprising:

20 a laser system including a laser oscillator oscillating a laser beam, a second
harmonic generation module receiving the laser beam from the laser oscillator and
generating a second harmonic wavelength, and a reflection mirror detachably
arranged between the oscillator and the second harmonic generation module;

a first Galvano scanner receiving a laser beam reflected by the reflection
25 mirror and scanning the laser beam in X-Y directions;

a first f- θ lens making the laser beam from the first Galvano scanner form the
same focal length on an entire marking area;

a first wafer holder supporting a wafer on which the laser beam passing
through the first f- θ lens is irradiated;

30 a second Galvano scanner receiving the laser beam passing through the
second harmonic generation module from the laser oscillation and scanning the laser
beam in the X-Y directions when the reflection mirror is detached from a laser beam
path;

a second f- θ lens making the laser beam from the second Galvano scanner form the same focal length on an entire marking area; and

a second wafer holder supporting a wafer on which the laser beam passing through the second f- θ lens is irradiated.

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4. The chip scale marker as claimed in claim 3, further comprising a horizontal transfer unit or a rotation unit to detach or attach the reflection mirror from or on the laser beam path.

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5. A laser system for a dual wavelength of 1064/355 nm, comprising:
a laser oscillator oscillating a laser beam;

a third harmonic generation module receiving the laser beam from the laser oscillator and generating a second harmonic wavelength; and

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a reflection mirror detachably arranged between the oscillator and the third harmonic generation module to reflect the laser beam oscillated by the laser oscillator in one direction when installed on a laser beam path,

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wherein the laser system oscillates a laser beam having a 1064 nm wavelength when the reflection mirror is installed on the laser beam path and a laser beam having a 355 nm wavelength when the reflection mirror is detached from the laser beam path.

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6. The laser system as claimed in claim 5, further comprising a horizontal transfer unit or a rotation unit to detach or attach the reflection mirror from or on the laser beam path.

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7. A chip scale marker for a dual wavelength of 1064/355 nm, the chip scale marker comprising:

a laser system including a laser oscillator oscillating a laser beam, a third harmonic generation module receiving the laser beam from the laser oscillator and generating a third harmonic wavelength, and a reflection mirror detachably arranged between the oscillator and the third harmonic generation module;

a first Galvano scanner receiving a laser beam reflected by the reflection mirror and scanning the laser beam in X-Y directions;

a first f- θ lens making the laser beam from the first Galvano scanner form the same focal length on an entire marking area;

a first wafer holder supporting a wafer on which the laser beam passing through the first f- θ lens is irradiated;

5 a second Galvano scanner receiving the laser beam passing through the third harmonic generation module from the laser oscillator and scanning the laser beam in the X-Y directions when the reflection mirror is detached from the laser beam path;

a second f- θ lens making the laser beam from the second Galvano scanner form the same focal length on an entire marking area; and

10 a second wafer holder supporting a wafer to which the laser beam passing through the second f- θ lens is irradiated.

8. The chip scale marker as claimed in claim 7, further comprising a horizontal transfer unit or a rotation unit to detach or attach the reflection mirror from or on the laser beam path.

9. A laser system for a dual wavelength of 1064/266 nm, comprising:
a laser oscillator oscillating a laser beam;

20 a fourth harmonic generation module receiving the laser beam from the laser oscillator and generating a fourth harmonic wavelength; and

a reflection mirror detachably arranged between the oscillator and the fourth harmonic generation module to reflect the laser beam oscillated by the laser oscillator in one direction when installed on a laser beam path,

25 wherein the laser system oscillates a laser beam having a 1064 nm wavelength when the reflection mirror is installed on the laser beam path and a laser beam having a 266 nm wavelength when the reflection mirror is detached from the laser beam path.

30 10. The laser system as claimed in claim 9, further comprising a horizontal transfer unit or a rotation unit to detach or attach the reflection mirror from or on the laser beam path.

11. A chip scale marker for a dual wavelength of 1064/266 nm, the chip scale marker comprising:

a laser system including a laser oscillator oscillating a laser beam, a fourth harmonic generation module receiving the laser beam from the laser oscillator and generating a fourth harmonic wavelength, and a reflection mirror detachably arranged between the oscillator and the fourth harmonic generation module;

5 a first Galvano scanner receiving a laser beam reflected by the reflection mirror and scanning the laser beam in X-Y directions;

 a first f- θ lens making the laser beam from the first Galvano scanner form the same focal length on an entire marking area;

10 a first wafer holder supporting a wafer to which the laser beam passing through the first f- θ lens is irradiated;

 a second Galvano scanner receiving the laser beam passing through the fourth harmonic generation module for the laser oscillator and scanning the laser beam in the X-Y directions when the reflection mirror is detached from a laser beam path;

15 a second f- θ lens making the laser beam from the second Galvano scanner form the same focal length on an entire marking area; and

 a second wafer holder supporting a wafer to which the laser beam passing through the second f- θ lens is irradiated.

20 12. The chap scale marker as claimed in claim 11, further comprising a horizontal transfer unit or a rotation unit to detach or attach the reflection mirror from or on the laser beam path.